IC 75-2556
21 October 1975

MEMORANDUM FOR: General Wilson

SUBJECT: Review of <u>Decision</u> (A Soviet View)

REFERENCE: V. V. Druzhinin and D. S. Kontorov <u>Decision Making and Automation: Concept, Algorithm, Decision (A Soviet View)</u>, Moscow, 1972. Translated and published by the USAF as No. 6 in the series <u>Soviet Military Thought</u>. GPO Stock Number 0870-00344

    1. This book is by far the best synthesis I have ever read of the great variety of disciplines that are encompassed in the decision process. As General of the Army S. M. Shtemenko points out in his introduction "the works in which the various aspects of this problem [decision], namely military, social, technical, psychological, etc., are synthesized, are very few." In suggesting this book to others I have asked them to tell me of any comparable synthesis in any book produced in the western world.

    2. The "etc." in the above quotation can be expanded to include modes of rational thought processes, information theory, network analysis, pattern recognition, human bit rate limitations, game theory, communication media analysis, computer applications, natural language vs. computer language, and many other disciplines which have been woven into a coherent presentation.

    3. The book borrows (acknowledged) from much work done in the West but there are also references to many experiments and ideas produced in the USSR. Of course there is a nod to Marx, Lenin and Engels, the standard price of admission to Soviet publishing houses. Even so some of the quotes must have been done with tongue in cheek, for example, the Engels quote starting Chapter II on computer systems: "...when the waves of industrial revolution rage...courageous heads are needed."

4. The book is full of historical and literary examples to sustain the point of discussion. The characters in the American novel <u>Seven Days in May</u> by Knebel and Bailey are used effectively to illustrate the various modes of human thought processes. (pp. 60-78)

5. I thought the treatment of the following subjects particularly well done:

    a. Types of organizational structures (pp. 80-86)

    b. Operational decision program (p. 116) (You will note how closely this tracks with the classic five paragraph "Estimate of the Situation" echoing our own military education.

    c. The human limitations of perception and thinking (pp. 133-134)

    d. Results of experiments in structures (pp. 144-152)

    e. Human memory capacity (pp. 155-158)

    f. Reflection (opponent interacted), communication problems, and modes of presentation (pp. 162-163)

    g. Language, natural and formal (pp. 173-174)

    h. Problems of translation (pp. 175-176)

    i. Set theory and topology (pp. 186-190)

    j. Dynamic display of information (pp. 261-266)

    k. Probability statements (not asking "what does the enemy intend to do" but rather "what is the possibility that ...." (p. 283)

6. There are some interesting philosophical conflicts within the book. On page 152 there is a strong marxist pitch. "The dialectical unity of collective problem solving for one man decision making is a principle." However the book ends (p. 296) on a different note of group thinking "thanks to automation."

7. According to the American Editor's Forward "The Soviets intend that it [the book] be read by commanders and

staff officers." If this is carried out and the principles put into practice I fear that the Soviet national nervous system will be much superior to ours. That is asserting quite a bit, but I think even a casual glance at the book (which, I understand, you have ordered) will project many of the same misgivings I have.

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cc:

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